

### **DETAILED ACTION**

**NOTE - This amendment replaces the amendment in the Notice of Allowance  
mailed 3-24-2010**

#### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after allowance or after an Office action under *Ex Parte Quayle*, 25 USPQ 74, 453 O.G. 213 (Comm'r Pat. 1935). Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on 4-21-2010 has been entered.

#### ***Information Disclosure Statement***

2. The information disclosure statement (IDS) submitted on 4-21-2010 was filed after the mailing date of the Notice of Allowance on 3-24-2010. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

### **EXAMINER'S AMENDMENT**

3. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided

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by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Robert C Faber on March 9, 2010.

The application has been amended as follows:

**Claims 29-31 (cancelled)**

***Reasons for Allowance***

4. The following is an examiner's statement of reasons for allowance: The closest prior art, Wright et al., teaches a casting process where the molten metal inflow rate is to the tundish is 1.5 times the outflow rate and inherently has a reduced inflow rate during the last section the of the first time period because of the gradually reducing static pressure of molten metal in the pouring vessel as evidenced by Wilson et al. However, the prior art as a whole fails to teach or fairly render obvious independent claim 1 as a whole because the claim requires that at the end of the first time period an ***unchanging*** filling rate of the tundish equal to a rate of discharging the melt is attained, whereas in the prior art, the filling rate of the tundish is proportional to the amount of molten metal in the vessel and is *constantly decreasing* during the end of the first time period (end of pouring prior to ladle switchover).

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

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accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nicholas P. D'Aniello whose telephone number is (571)270-3635. The examiner can normally be reached on Monday through Thursday from 8am to 5pm (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jessica Ward can be reached on (571) 272-1223. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Nicholas P D'Aniello/  
Examiner, Art Unit 1793

/Jessica L. Ward/  
Supervisory Patent Examiner, Art Unit 1793